

Lymphocytic Choriomeningitis Virus (LCMV) Fact Sheet

Lymphocytic choriomeningitis virus (LCMV) infection is a rare illness, caused by a virus that is carried by rodents (including mice, hamsters and guinea pigs).

LCMV mostly causes infections in wild mice, but this virus can also infect laboratory animals and pet rodents (including hamsters and guinea pigs). However, the number of known LCMV infections in humans is low.

LCMV can cause illness in people who are exposed to infected mice, hamsters, guinea pigs or other rodents.

Human LCMV infection is very rare; however, people can catch LCMV infection by direct contact with infected rodents or rodent droppings, urine, or saliva. Recently, the transmission of this virus to persons receiving organ transplants from an infected donor was reported by the Centers for Disease Control and Prevention (CDC).

Certain groups of people appear to be at higher risk for human LCMV infection.

Individuals of all ages who come in contact with rodents or their urine, droppings, or saliva are potentially at risk for LCMV infection; however, certain groups may be at increased risk for developing illness from the virus, including laboratory workers and persons with weakened immune systems. Also, LCMV infection during the first or second trimester of pregnancy can sometimes cause severe illness or developmental defects in the fetus.

Symptoms of Human LCMV infection are varied.

Human LCMV infection is rare. In persons with normal immune systems, the infection usually causes either no symptoms or a mild, self-limited illness. Some people with LCMV infection may feel like they have the flu, with fever, a sick feeling ("malaise"), loss of appetite, muscle aches, headache, and occasionally nausea, vomiting, cough or sore throat. Some people may develop LCMV infection of the brain and its surrounding membranes (meningitis), but this is also rarely fatal. However, in a person whose immune system is seriously compromised, the infection can sometimes be fatal.

You can lower your risk for LCMV infection from pet rodents by:

- Washing hands with soap and water (or alcohol-based hand sanitizers when soap is unavailable and hands are not visibly soiled) after handling pet rodents or cleaning up rodent droppings, cages, or areas where rodents have been.
- Keeping rodent cages clean and free of soiled bedding.
- Cleaning cages outdoors or in a well-ventilated area.
- Closely supervising young children when cleaning cages or handling rodents and supervise or assist children in washing their hands immediately after handling rodents and rodent cages or bedding.
- Never kissing or holding pet rodents close to the face.
- Never allowing pet rodents to come into contact with wild rodents or their droppings or nests. Cover pet rodent cages and food supplies and always supervise pet rodents when they are not in their cages.

Persons with weakened immune systems should avoid contact with rodents.

Pregnant women who handle rodents should take the following precautions:

- Avoid contact with wild rodents. Pregnant women who reside in a household with a wild rodent infestation should have the infestation addressed promptly by a professional pest control company or another member of the household.
- Keep pet rodents in a separate part of the home. Pregnant women should ask another family member or friend to clean the cage and care for the pet or should arrange for temporary adoption of the pet by a responsible person. Pregnant women should avoid prolonged stays in any room where a rodent is kept.